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## INFORMATION TECHNOLOGIES IN THE LIFE OF STUDENTS AS ONE OF THE KEY ASPECTS OF TRAINING IN EDUCATION

The most important elements of the electronic part of the world information space are professional databases, business Internet resources, and electronic libraries. The increasing role of the information product as a trend in the development of the information society determines the need for processing ever-increasing volumes of information, the need for various forms of information perception, as well as the need for the relevance and accuracy of information. A modern specialist must be able to: identify information needs to solve a specific problem; use information resources taking into account existing legislative and ethical standards; gain access to information resources; give a professional assessment of information; use information found in world resources when solving professional problems. The widespread development of information technologies and their penetration into spheres of social life has determined global development over the past few decades. This process requires training a sufficient number of qualified specialists, as well as increasing the general level of computer literacy. This requires improvement and structural changes in the education system, as well as provision of modern material and technical equipment for the educational process. The ability to find the necessary information and use it in one's activity is a mandatory requirement for specialist of any profile. The article reveals the role of information technologies in the education of university students. Advancement towards an information society requires the use of innovative teaching methods that will allow students to learn at a pace that suits them and at a level that matches their abilities.

**Key words:** university, students, learning, information technologies, progress.

Зеніна Ірина, Гаврилова Надія. Інформаційні технології в житті студентів як один з ключових аспектів підготовки в навчанні. Найважливішими елементами електронної частини світового інформаційного простору є професійні бази даних, ділові Інтернет-ресурси, електронні бібліотеки. Зростання ролі інформаційного продукту як тенденції розвитку інформаційного суспільства визначає потребу в обробці постійно зростаючих обсягів інформації, потребу в різноманітних формах сприйняття інформації, а також потребу в актуальності та точності інформації. Сучасний фахівець повинен вміти: визначати інформаційні потреби для вирішення конкретної проблеми; використовувати інформаційні ресурси з урахуванням існуючих законодавчих та етичних стандартів: отримати доступ до інформаційних ресурсів; давати професійну оцінку інформації; використовувати інформацію зі світових ресурсів при вирішенні професійних завдань. Широкий розвиток інформаційних технологій та їх проникнення у сфери суспільного життя визначило глобальний розвиток останніх кількох десятиліть. Цей процес потребує підготовки достатньої кількості кваліфікованих спеціалістів, а також підвищення загального рівня комп'ютерної грамотності. Це потребує вдосконалення та структурних змін у системі освіти, а також забезпечення сучасним матеріальнотехнічним оснащенням навчального процесу. Уміння знаходити необхідну інформацію та використовувати її у своїй діяльності є обов'язковою вимогою до спеціаліста будь-якого профілю. У статті розкривається роль інформаційних технологій у навчанні студентів ВНЗ. Просування до інформаційного суспільства вимагає використання інноваційних методів навчання, які дозволять учням навчатися в зручному для них темпі та на рівні, який відповідає їхнім здібностям.

**Ключові слова**: університет, студенти, навчання, інформаційні технології, прогрес.

**Formulation of the problem.** In today's world, where the development of digital technologies is gaining more and more importance, education cannot be left behind. The use of digital technologies in education has already become an integral part of

the educational process. However, with the development of technologies, the question of their effective use in the educational environment arises [3]. The success of reforming Ukrainian education in the field of modern information technologies depends, first of all, on the active participation of all education workers in this process. New information technologies are a set of mathematical and cybernetic methods, modern technical means that ensure the collection, storage, processing and transmission of information based on modern computer technology. Note that this is the most commonly used definition of information technology, although other definitions are also found along with it. New information technologies are a set of modern computer equipment, telecommunications, and software tools that provide interactive software and methodological support for modern teaching technologies. Educational institutions face a serious challenge in preparing citizens who are harmonious with the era of information technology. First of all, this concerns the transformation of the educational process itself. One of the main issues being considered today is the connection of educational institutions to the global Internet. The concept of costly education as a non-productive sphere should be replaced by the concept of education as a production sphere that creates a critical element of capital and increased investment in human resources [1]

Analysis of literary sources. Such authors as Zelenov E. A. [1], Kornuta O., Pryhorovska T., Potiomkina O. [2], Kahn E.B, Ramsey L.T. [3], with the help of digital technologies can make the learning process more effective and individual. Adaptive learning, interactive tasks and assessment tools. The authors found out that strategies and transformations of pedagogy in the conditions of sustainable development of society allow teachers to better understand the needs of each student and adapt the educational process according to their abilities and achievements.

The main objectives of new educational information technologies are the development of interactive environments for managing the process of cognitive activity and access to modern information and educational resources (multimedia textbooks and textbooks built on the basis of hypertext, various databases, educational sites, and other sources). The peculiarity of most institutions in education today is that they are based on modern personal computers. At the same time, the personal computer confidently entered the system of didactic tools, becoming an important element of the subject environment. It must be emphasized that in pedagogy, interest in information technology is associated, first of all, with solving the problem of creating a high-quality educational base, in particular electronic learning tools. As is known, recently in educational institutions of Ukraine there has been a tendency to reduce the classroom load of teachers and increase the share of independent work of students, which leads to active work on the creation and implementation of computer technologies in the educational process. It is the effective use of new information technologies, their competent infusion into the pedagogical process of teaching various disciplines, the creation in educational institution and in education as a whole, a unified information environment will allow the transition to a new modern concept of education. Today, teachers master proprietary methods for organizing the presentation of educational material, develop scenarios for using an educational product in a lesson plan for organizing training or in the process of students' independent work, and carry out their own lesson plans using well-known curriculum resources.

Practical orientation significantly increases the effectiveness of teaching teachers, increases their motivation to use modern information technologies, and creates a need for teachers to use modern information technologies in the educational process. Modern education provides for a significant expansion of the role of information technology as an effective means of self-development, self-improvement and self-education of students. The computer allows the teacher to significantly expand the possibilities of presenting different types of information. The use of new information technologies in teaching allows us to consider the student as a central figure in the educational process and leads to a change in the style of relationships between its subjects. At the same time, the teacher ceases to be the main source of information and takes the position of a person who organizes and manages the independent activities of students. His main role is now to set learning goals and organize the conditions that are necessary for the successful solution of the educational process vocative tasks. The use of new information technologies in the educational process allows rebuild the traditional methodological teaching system into an innovative one. At the same time, Internet information resources are important because they help teachers build your work in a new way. The introduction of the Internet into the education system has shown its enormous potential. Although at the same time, some difficulties emerged, for example, the high cost of organizing training compared to traditional technologies (software and hardware, additional organizational and methodological aids, new textbooks).

Modern information technologies make it possible to include any multimedia objects (graphics, sound, animation, video) into a document. Ability to work with multimedia documents, creating computer presentations, maintaining databases, creating and maintaining websites becomes important in the information society. Introduction into the educational process hypertext technologies have provided students and teachers with fundamentally new opportunities for working with text documents. Multimedia tools in combination with communication tools have given rise to multimedia computer networks that make it possible to connect educational institutions among themselves and with the outside world, evaluate the importance of pedagogical techniques, giving students the opportunity to enter into a constructive dialogue with other educational expected, with other teachers, to use other didactic means. Multimedia technologies have not only turned the computer into a full-fledged interlocutor, but also allowed students, without leaving the classroom, to witness historical events of the past and present, to visit the most significant museums and cultural centers of the world, the most remote and geographically interesting corners of the Earth. Thanks to the ability to combine texts, images, animation and sound, multimedia tools have exceptional attractive power, mobilizing all the perceptive abilities of the student, using the associative power of information media. For example, a video sequence gives the information an affective and emotional connotation, as well as a didactic character, taking into account the influence of the content of the transmitted message, its efficiency, focus and visibility. A qualified computer user can create the specialized applications he needs using visual object-oriented programming tools. Modern man needs to master a communicative culture. A necessary condition for successful professional activity is the creation and publication on the Internet of websites with information about the activities of the organization or enterprises. Currently, the problem has arisen of developing in teachers a set of professional competencies that are necessary for effective work in modern conditions. Learning and teaching in conditions of excess information, focusing on the formation of competencies.

The ability to independently learn and "obtain" knowledge requires significant replenishment and changes in traditional methodological baggage. The new stage of development poses new challenges for us in training teachers to master computer technology. Today it is not enough just to master a computer. We need serious methods and technologies for using information resources in the educational process. It is necessary that they be organically and effectively combined with the traditional activities of teachers. The teacher must be able to create his own educational module, his own training program, possess specialized techniques. Today it is extremely necessary to have network administrators, system analysts, technicians and others on staff of departments (administrations).

There are many specialists who will help you use information resources comprehensively. To implement the functions of a computer as a teaching tool, you need specific software that meets psychological and didactic requirements. Examples of software can be electronic textbooks (for presenting educational material), test systems for monitoring students' knowledge and skills, automated teaching systems (for organizing and managing students' cognitive activity within the framework of mastering a specific academic discipline or block of disciplines).

Automated training systems involve not only the presentation of new information and testing, but also the provision of assistance to the student, the ability to customize to his characteristics, the accumulation of information about working with the system, about students, and test results.

It is necessary to create specialized modular electronic publications or, in other words, open multimedia systems for each subject and academic discipline.

Electronic and traditional educational materials should harmoniously complement each other as parts of a single educational environment, and the information structure should ensure their effective use.

Educational information technologies enable the teacher to achieve didactic goals using both individual types of educational work and any set of them, i.e. design the learning environment. The teacher receives additional opportunities for support and direction. Development of the student's personality, creative search and organization of their joint work, development, and selection of the best options for educational programs. Thus, new information educational resources are universal a powerful means of supporting the educational process of various forms and levels. With their help you can: receive educational and reference information in various forms; organize the processes of assimilation of knowledge, acquisition of skills and abilities of independent educational or practical activities; effectively monitor learning results, repetition; to intensify the cognitive activity of students; form and develop certain types of thinking.

Educational information technologies enable the teacher to achieve didactic goals using both individual types of educational work and any set of them, design the learning environment. The teacher receives additional opportunities for support and direction. Development of the student's personality, creative search and organization of their joint work, development, and selection of the best options for educational programs. The degree of integration of new information technologies into the educational process can be divided into three levels. First level. Using various means of presenting educational information and global information resources to solve traditional educational problems at a new qualitative level. Development and provision of educational material based on new technologies and their use in individual academic disciplines, i.e. use of means of presenting educational information. For example, the creation of electronic educational software events and workshops, the use of new technologies for conducting face-to-face (traditional) lectures and seminars using presentations. Second level. Implementation of the educational process using interactive tools interaction between participants in the educational process (distance learning or open learning technologies on the global network). At this level, web conferences, forums, and educational materials are used.

Third level. Solving fundamentally new problems. The use of integrated educational environments, where the main component is not only the technologies used, but also the content, i.e. informational resources. The combination of modern computer science tools and information resources makes it possible to create educational disciplines based on business Internet resources and professional databases. At this level new information technologies are used as a means of access to global information resources, on the basis of which the educational process is built. Training using business resources on the Internet and professional databases fills.

The curriculum has qualitatively new content and allows the use in the educational process of professional information resources that are available to specialists for solving real practical problems. The development of information technology stimulates the emergence of a new educational system that will provide millions of people with high-quality educational services while reducing unit costs for education. Based on this, the use of information technology in education should be considered as a strategic decision focused on the formation and development of a new educational system. Remote access information resources are used in the educational process of universities many countries of the world. Information learning as a new educational technology will resolve some of the contradictions that arise in traditional education. Among them we can highlight: a high degree of normativity of theoretical knowledge, the potential danger of the formation of dogmatism in judgments and assessments, loss of flexibility of thinking; high rate of updating of subject knowledge and its low actualization in practical activities; lack of a clearly defined orientation towards creativity and innovation.

In case of excessive immersion in the world of digital technologies in a person "clip" thinking is formed (the ability to perceive and process information only in small portions), which significantly reduces the ability to analyze and concentrate. This can lead to a superficial approach to analysis and, accordingly, to making ill-considered decisions [1].

Features of this way of thinking are fragmentation, attention deficit, discontinuous perception, but multitasking ability, speedy intuition thinking and analyzing. So, there were observed the follow tendencies: impossibility to avoid "clip" thinking development and achievement levels and reduces the assimilation of knowledge and students' achievement level decreasing with

traditional means of methodical guidelines usage. Special way of students' thinking challenge changes in teaching methods, lectures, tutorial preparation. Active and traditional teaching methods alter the presentation, re-structure the information [2; 4].

**Conclusions.** In modern education, information is a new element of the educational process. In the educational process, built on information resources, the role of the student increases, since he does not assimilate ready-made ideas and concepts, but draws his own conclusions from a variety of facts, information, and opinions. Thus, the process of systematization and compared information is assigned not only to the teacher, but also to the student. The use of new information technologies in the learning process is ambiguous in its assessment, therefore it requires serious justification expediency, since many areas in working with information technologies in the educational process have not yet been studied. The inclusion of modern computer and telecommunication technologies in the educational process, the widespread use of global information resources creates opportunities to improve the quality of educational services, but, at the same time, requires changes in the content and methods of teaching.

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